

JOB DESCRIPTION
MURFREESBORO WATER AND SEWER DEPARTMENT
PLANT ELECTRICIAN

1. JOB TITLE: Plant Electrician

2. DEFINITION: The Plant Electrician performs skilled work in the installation, operation, maintenance and repair of electrical and mechanical devices throughout the water/wastewater system, generally without direct supervision. This position reports directly to the Superintendent of either the water or wastewater treatment plant. All employees are responsible to the Director and to the City Manager. The position is classified as non-exempt for purposes of the Fair Labor Standards Act, as having a possible occupational exposure to bloodborne pathogens, and as Safety Sensitive; the employee is subject to pre-employment, reasonable suspicion, post accident, random, promotion and transfer, return to duty and follow-up drug and alcohol testing.

3. EQUIPMENT/JOB LOCATION:

- a. This position requires the use of hand tools, electrical equipment and vehicles.
- b. The job involves work both indoors and outdoors, and the employee will be exposed to inclement weather, as well as biological, chemical, electrical and mechanical hazards. All City facilities and vehicles are smoke-free.

4. ESSENTIAL FUNCTIONS OF THE JOB:

- a. Maintains sewage lift stations.
- b. Installs, maintains and repairs electrical equipment at the plant and other locations.
- c. Checks status of various equipment in the field; makes adjustments and repairs as needed; reports equipment status and condition to supervisor.
- d. Responds to alarms and takes corrective actions.
- e. Performs or assists in overhaul of equipment.
- f. Makes equipment adjustments and repairs to maintain operations within predetermined limits.
- g. Restarts equipment after an electrical outage.
- h. Identifies and corrects problems such as pump failure, overheated motors, and noisy bearings.
- i. Installs and repairs electrical panels, starters, lights, heaters, wiring and other electrical devices.
- j. Removes and reinstalls pumps, motors, seals, bearings.
- k. Switches electrical feeds to operational units such as pumps, feeders and drives.
- l. Unclogs pumps.
- m. Maintains odor control systems.
- n. Takes readings from charts and meters, changes charts, keeps accurate logs.
- o. Performs maintenance on supervisory control and data acquisition systems.
- p. Calibrates electrical devices.

- q. Performs limited instrument repairs.
- r. Performs routine cleaning of equipment and premises.
- s. Intermittently drives, walks, climbs up and down ladders, bends and stoops in the performance of the job.
- t. Performs tasks in proximity to electrical, chemical, biological, mechanical and physical hazards.

5. ADDITIONAL EXAMPLES OF WORK TO BE PERFORMED:

Performs additional duties and special projects as assigned.

6. REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

- a. Must be a minimum of 21 years of age.
- b. Must have diploma from an accredited high school or possess a GED. Additional training in air conditioning/refrigeration at the vocational technical school level is desirable but not required.
- c. At least two years experience as a journeyman electrician, servicing electrical circuits, motors, starters, and pumps is strongly preferred.
- d. Must have legal authorization to work in the United States.
- e. Must submit to and pass a drug screen test upon offer of employment.
- f. Must have a driver's license valid in the state of Tennessee with the ability to safely operate a motor vehicle.
- g. Must be able to comprehend both oral and written instruction and to communicate both orally and in writing, in English.
- h. Ability to perform basic record keeping and mathematical calculations.
- i. Must be able to use hand tools, meters, calculators, keyboards and electrical/mechanical equipment and to manipulate machinery.
- j. Must be able to perform routine tasks from written and oral instructions and to exercise independent judgment within the limits of the position.
- k. Must be able to perform the duties of the job for the entire workday, periodic standby and occasional overtime. May be required to work evening, night, weekend and/or holiday hours.
- l. Ability to detect odors and colors indicative of hazardous gases and status indicators.
- m. Ability to sense vibration and temperature by touch.
- n. Ability to detect alarms and indicators of equipment malfunctions in normal aural range.
- o. Ability to read gauges, dials, equipment information plates, charts, and manuals, and make adjustments and do work requiring depth perception, and detect changes in the visual appearance of equipment and/or processes.
- p. Must have the ability to establish and maintain an effective working relationship with supervisors, co-workers and the public.
- q. The employee may be subject to a pre-employment physical examination with a written statement from the physician as to the employee's ability to meet the

physical strength and dexterity requirement of the position.

- r. Physical strength and dexterity requirements include but are not limited to:
 - 1. Lift and carry equipment or tools up to 100 lb.
 - 2. Remove and replace a manhole cover.
 - 3. Work in areas without evidencing vertigo.
 - 4. Climb up and down approximately 70 feet of stairs or ladders carrying tools or equipment.
 - 5. Work in confined spaces throughout a shift.
- s. Must demonstrate a good work ethic, including a willingness to perform job place tasks and to assist coworkers without redundant directive.
- t. Must demonstrate good workmanship, performing tasks neatly and in a safe and timely manner.
- u. Must demonstrate a willingness to comply with and a knowledge of or ability to learn safety rules and equipment, including identification of, precautions for, and emergency response to biological, chemical, electrical and mechanical hazards, and to asphyxiating, toxic and explosive gases and vapors.

Non Exempt
Safety Sensitive
July 6, 2006